

Work Order ID 80917

March-05-12 10:46:56 AM

80917

Page 1

Item ID: D2916-7 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Cable Guard, 212 Skidtube
 Start Date: 05/03/2012 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 19/03/2012 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: MLJ Date: 12/03/05 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D2916	Rev D

100 0.00
100 FLOW WATER JET
 Waterjet Memo 0.00
 FLOW CNC Waterjet 1-Cut as per Dwg D2916 Dwg Rev: D Prog Rev: D 2-
 Deburr if necessary

12 03 12 (4)

110 0.00
110 QC2- Inspect parts off machine FAI/FAIB
 QC Memo 0.00
 Quality Control

12 03 12 (4)

120 0.00
120 HAAS CNC VERTICAL MACHINING #1
 HAAS I Memo 0.00
 HAAS CNC vertical machine #1 BATCH: _____ 1- Mill as per Folio FB077 Rev: AA
 & Dwg D2916 Rev: D 2-Deburr per dwg D2916

SL 12/03/27 (3) (PTC) →

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: Machining NCR: Yes No DQA: _____ Date: _____

Resolution: Scrap Disposition: Scrap QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
11-03-27	120	- 1 part scrapped - started part with wrong program * opp error!	S 12/03/27 as2ar2	scrap + no replace	SL 12/03/27	onf 12/03/28	S 12/03/28 as2ar2	S 12/03/28

NOTE: Date & initial all entries

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Page 2

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 Item Name: Cable Guard, 212 Skidtube
 Start Date: 05/03/2012 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 19/03/2012 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.00	SL 12-03-24			3	0		
140 *140* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00	on 12/03/28			3	0		
150 *150* Packaging Packaging	Identify as per dwg & Stock Location: ST205 Memo	0.00 0.00							(3) 12-03-308P

W/O:		WORK ORDER CHANGES					
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.00							
Quality Control									

12/4/2012

01203-30

W/O:		WORK ORDER CHANGES					
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-05-12 10:47:00 AM

Page 1

Work Order ID: 80917

80917

Parent Item: D2916-7

D2916-7

Parent Item Name: Cable Guard, 212 Skidtube

Start Date: 05/03/2012

Required Date: 19/03/2012

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A New Issue 06-06-19 JLM
IPP Rev:B Now water jet 06-07-14 EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MUHMWB10		Purchased	No			100	sf	573.6043	0.26	1.094737			

MUHMWB10

UHMW 1" Black

**

W 12.03.12

Location	Loc Qty	Loc Code
MAT018	316.48	
120035	74.48	
120401	242	
MAT019	257.1243158	
117321	74.6	
117738	93.28	
117819	83.3	
118814	1.5	
119145	4.44431579	

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DART AEROSPACE LTD		Work Order: 80917
Description: Cable Guard		Part Number: D2916-7
Inspection Dwg: D2916	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

	Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
	1.75 ✓	+/-0.030	1.745	✓		Vern	JL-1
	21.38 ✓	+/-0.030	21.38	✓		m-tape	
	1.000 ✓	+/-0.010	1.000	✓		Vern	
	17.375 ✓	+/-0.010	17.375	✓		m-tape	
	20.433	+0.005/-0.000					
F-F	0.70 ✓	+/-0.030	.694	✓		Vern	JL-1
	0.78 ✓	+/-0.030	.781	✓			
	0.95 ✓	+/-0.030	.948	✓			
L-L	12.84	+/-0.030	12.844	✓		H-G	
	14.65	" "	14.653	✓			
	16.47	" "	16.471	✓			
	18.28	" "	18.28	✓		m-tape	
	Ø.438	+0.006/-0.001	.438	✓		Vern	JL-1
	.78	+/-0.030	.781	✓			
	.95	+/-0.030	.951	✓			
	.70	" "	.690	✓			
	.080	+/-0.010	.080	✓			

Measured by: [Signature]	Audited by: [Signature]	Prototype Approval:	N/A
Date: 12/03/27	Date: 12/03/28	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.01.12	New Issue P/O D205-665-015	KJ/RF [Signature]	[Signature]

Dart Aerospace Ltd

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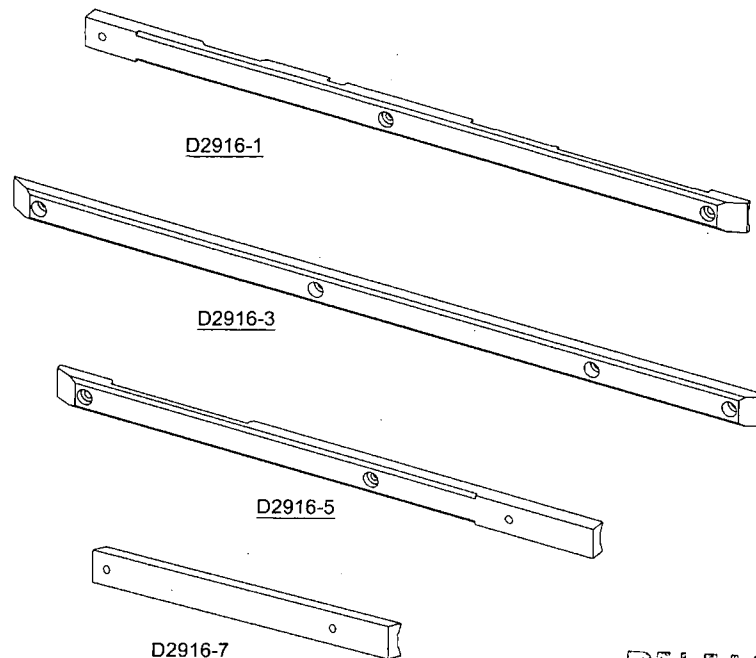
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 80917 ULS

12/03/05

NOTES:

- 1) MATERIAL: UHMW BLACK TIVAR 1000 VIRGIN MATERIAL
REF DART SPEC MUHMB10
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL UNMARKED RADII 0.020 TO 0.040
- 6) IDENTIFICATION: ENGRAVE P/N ON LOWER SIDE TO MAX DEPTH OF 0.010 AND MIN RADIUS OF 0.010
- 7) WEIGHT:
D2916-1 = 1.37 lbs
D2916-3 = 2.33 lbs
D2916-5 = 1.19 lbs
D2916-7 = 0.96 lbs
- 8) ENGRAVE TWO DART LOGOS (OPPOSITE AS SHOWN) ON UPPER SIDE TO MAX DEPTH OF 0.015 AND MIN RADIUS OF 0.250
- 9) MACHINE CONSTANT SECTION A-A
- 10) MACHINE CONSTANT SECTION B-B
- 11) MACHINE CONSTANT SECTION C-C
- 12) MACHINE CONSTANT SECTION F-F
- 13) MACHINE CONSTANT SECTION G-G
- 14) 25° ANGLE OF TRANSITION BETWEEN SECTIONS WITH MIN RADIUS OF 0.50
- 15) 50° ANGLE OF TRANSITION BETWEEN SECTIONS WITH MIN RADIUS OF 0.50
- 16) MACHINE SLOT WITH 0.063 RADIUS OF TRANSITION BETWEEN SECTIONS
- 17) ALL HOLES DRILLED ON CENTERLINES



RELEASED
R 2011-11-02
JWB

D	REVISE MACHINE SLOT. (ZN C5-2, C4-4, C4-5, C6-5) REVISE SECTIONS D-D, L-L, N-N	RF	11.10.07
C	REVISE D-D; ADD L-L, M-M & N-N; FOR D4406-041/-043 COMPATIBILITY	RF	11.08.17
B	ADD K-K FOR D2521 COMPATIBILITY	CP	00.02.24
A	NEW ISSUE	CP	99.09.29
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. D
MFG. APPR.	RF	D2916	SHEET 1 OF 6
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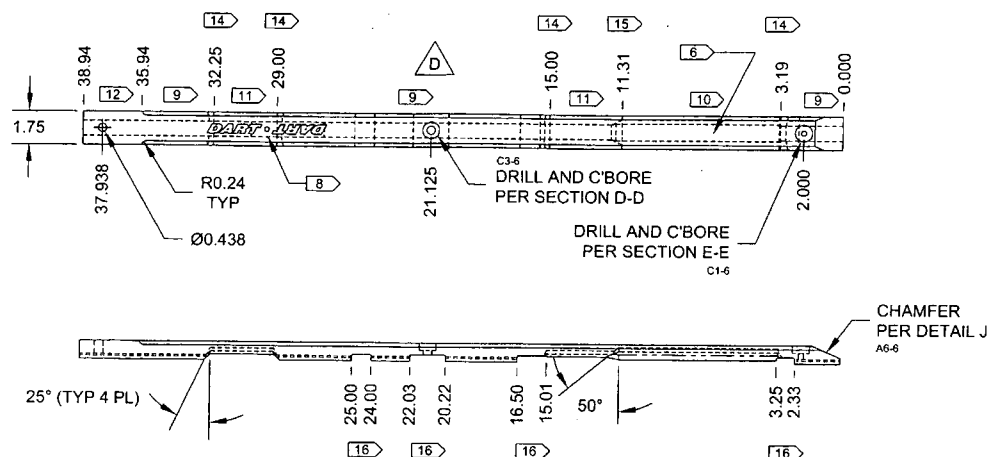
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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D2916-1

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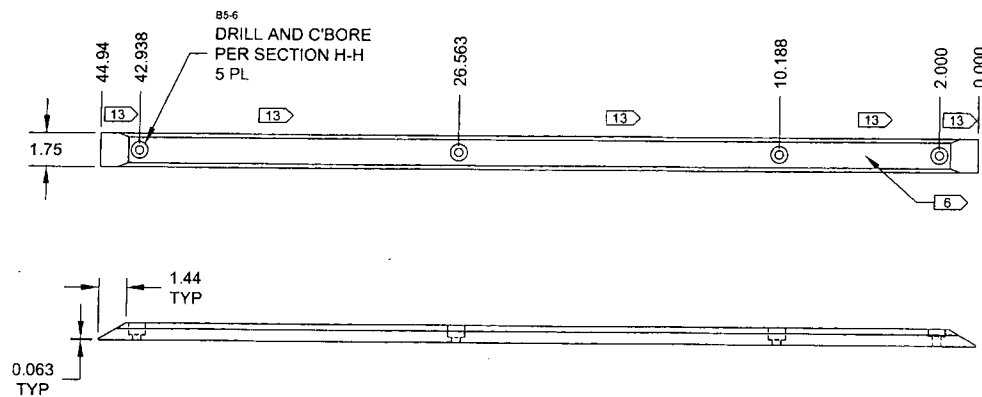
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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D2916-3

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2011-11-02
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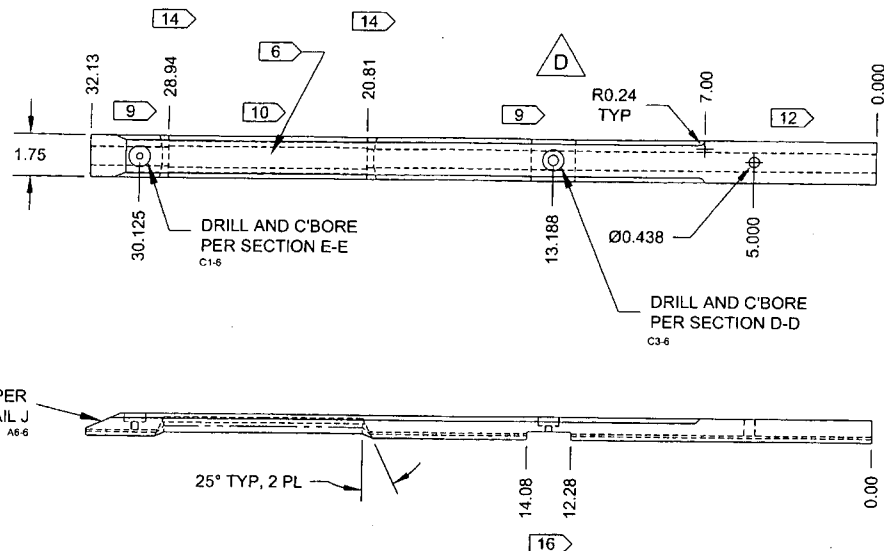
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D2916-5

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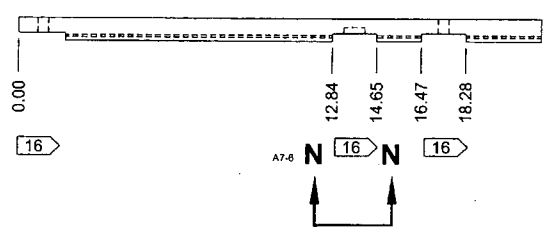
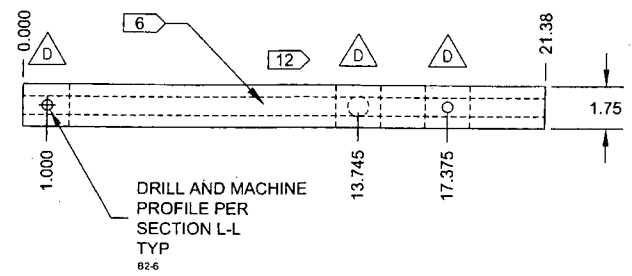
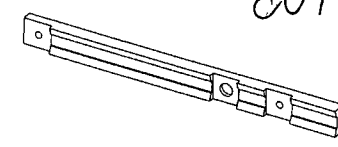
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D2916-7

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2011-11-02
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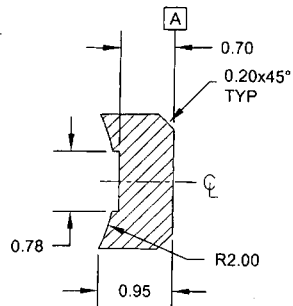
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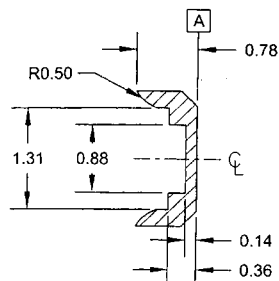
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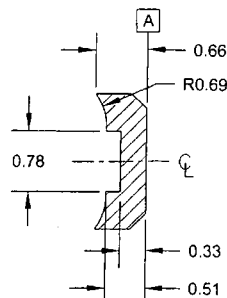
SECTION A-A
SCALE 4X

C3-2
C6-2
C4-4
C8-4



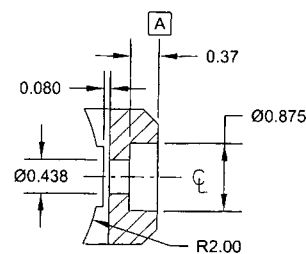
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C3-2
C5-4



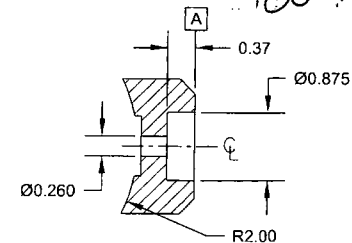
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C5-2
C4-2



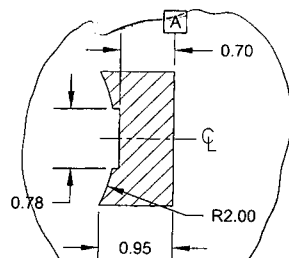
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SCALE 4X

C4-2
C3-4



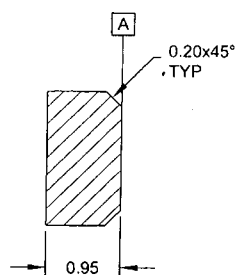
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C3-2
C5-4



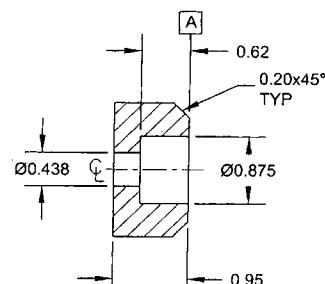
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C6-2
C3-4
C5-5



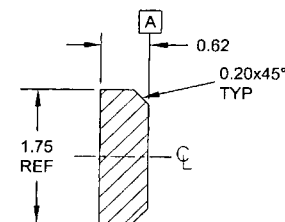
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SCALE 4X

C3-3
C4-3
C5-3
C6-3
C7-3



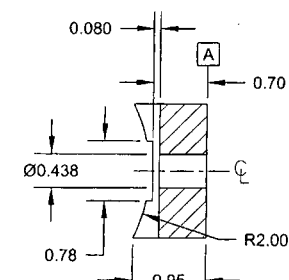
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SCALE 4X

C6-3



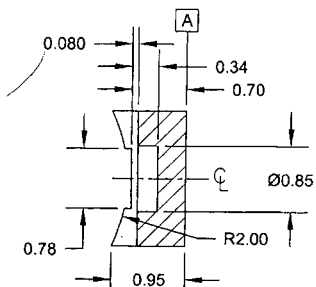
SECTION K-K
SCALE 4X

B3-2
B4-2
B5-2



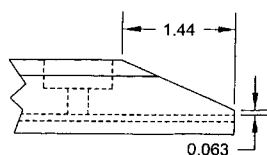
SECTION L-L
SCALE 4X

C5-5



SECTION N-N
SCALE 4X

B6-5



DETAIL J
SCALE 4X

B3-2
B7-4

RELEASED
2011-11-02

DESIGN	4	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	4	DRAWING NO.	REV. D
MFG. APPR.	4	D2916	SHEET 6 OF 6
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